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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,481

11/10/2003

Sonya S. Johnson

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EXAMINER

ROBERTS, LEZAH

ART UNIT

PAPER NUMBER

1614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/705,481

Applicant(s)

JOHNSON ET AL.

Examiner

Lezah W. Roberts

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,6-11,14-16,18-21 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-11, 14-16, 18-20, 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This Office action is in response to the Request for Continued Examination filed March 5, 2007. All previous rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claims***

#### **Claim Objections**

Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim recites the "comprising a heating agent", which is already recited in the independent claim.

#### **Claim Rejections - 35 USC § 112 - Indefiniteness**

Claim 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the agent" in lines 1-2 of the claim but fails to specify what agent it is referring to. There is insufficient antecedent basis for this limitation in the claim.

**Claim Rejections - 35 USC § 103 – Obviousness (Previous Rejection)**

1) Claims 1, 4-11, 14-16, 18-20 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Record et al. (US 5,372,824) in view of Sturtz (US Plant 8,645). The rejection is maintained in regards to claims 27-33 and is withdrawn in regards to claims 1, 4-11, 14-16 and 18-20.

Applicant has amended the claims to recite the specific warming agents that may be used in the compositions. In regards to the method claims, Applicant argues the combined references fail to disclose the step of adding Erospicata oil and a cooling agent to a consumable product. This argument is not persuasive.

In regards to the method claims, replacing the peppermint oil with Erospicata oil satisfies the limitations of adding it and a cooling agent to a consumable product.

2) Claims 1, 4-10, 27-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (US 4,645,662) in view of Sturtz (US Plant 8,645). The rejection is maintained.

Applicant has amended the claims to recite the specific warming agents that may be used in the compositions. Applicant argues there is no motivation to combine the references. Nakashima teaches away from Sturtz by encouraging incorporation of 1-menthol as a flavor. The Patent Office has improperly applied hindsight by selectively piecing together teaching of each reference in an attempt to recreate what the claimed invention discloses. Applicant further submits not all elements, such as the specific warming agents are taught by the references. Applicant also argues the combined

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references fail to disclose the step of adding Erospicata oil and a cooling agent to a consumable product. These arguments are not persuasive.

The primary reference Nakashima does encourage menthol as a flavor, but it is also a cooling agent. The reference further goes on to disclose if too much menthol is incorporated into the composition it can impart an excessive cooling taste. Therefore, it would have been obvious not to use too much menthol or peppermint oil. Furthermore Example 11 discloses using the two in combination with one another, therefore, it would have been obvious to replace the peppermint oil with Erospicata to ensure that the compositions did not have the excessive cooling taste without taking away the peppermint flavor. In regards to teaching all the elements, the reference teaches pimento and spice oleoresins, which is also capsicum oleoresin, as recited in claim 1. In regards to the method claims, replacing the peppermint oil with Erospicata oil satisfies the limitations of adding it and a cooling agent to a consumable product.

#### **Claim Rejections - 35 USC § 103 – Obviousness (New Rejections)**

1) Claims 1, 4-11, 14-16, 18-20 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strobridge (US 5,015,464) in view of Sturtz (US Plant 8,645).

Strobridge discloses anti-plaque chewing gums comprising anti-plaque properties, which are effective against plaque, but also tastes good. The gum must comprise an anti-plaque effective amount of eucalyptol, menthol, methyl salicylate and thymol. Menthol is also considered a cooling agent, which encompasses the instant

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claims. It also comprises a flavor system consisting either separately or in combination spearmint, peppermint and cinnamon oils (col. 3, lines 19-49). Cinnamon oil comprises cinnamic aldehyde as well as eugenol, two heating agents, which encompasses the instant claims. It is concluded the oils are in a 1:1:1 ratio, therefore peppermint oil comprises 33% of the flavoring compositions and 0.033% to 0.231% of the total composition, encompassing claims 6, 9-10, 16, 19-20 and 30-31. The reference differs from the instant claims insofar as it does not disclose using Erospicata oil as a flavoring.

Sturtz discloses a new mint plant species named Erospicata and has the same organoleptic properties as peppermint oil (col. 2, lines 21-23). The reference teaches Erospicata has a characteristic peppermint taste and smell, yet its oil contains much lower levels of menthol and much higher levels of menthone, less than 1%. The low menthol content of the essential oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The menthone content provides a "hot" peppermint taste and odor. The absence of this alcohol helps avoid nasal and gastrointestinal irritation, while the menthone provides peppermint-like organoleptic properties. The mint plant also expresses an oil that is low in carvone and piperitone content. The substantial absence of carvone and piperitone is important because these substances provide a taste that is organoleptically undesirable in peppermint oil. Carvone provides a spearmint taste, while piperitone imparts a bitter taste (col. 2, lines 5-36). The reference differs from the instant claims insofar as it does not teach consumable products comprising a cooling agent, a heating

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agent or a method of enhancing the flavor of an oral product by adding Erospicata, a cooling agent and heating agent.

It would have been obvious to one of ordinary skill in the art to have used the erospicata oil in place of or in addition to the peppermint oil in the compositions of the primary reference motivated by the desire to make a favorable chewing gum without adding too much additional menthol which would provide an excessive cooling effect and cause excess irritation to the nasal, oral and gastrointestinal epithelium, as disclosed by the secondary reference.

In regards to claims 6, 9-10, 16, 19-20 and 30-31, normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. In re Aller 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art to have added the two components in a 1:1:1 ratio or adjusted the amounts accordingly motivated by the desire to obtain optimal flavor in the chewing gum compositions, as supported by case law.

In regards to claims 27-29, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claims 32-33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

2) Claims 1, 4, 6-9, 11, 14-16, 18-19, 27-30 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumamoto et al. (US 2002/0119231) in view of Sturtz (US Plant 8,645).

Kumamoto et al. disclose warming compositions that are incorporated into consumable product such as chewing gums (paragraph 0043). The compositions comprise warming agents including capsaicin and gingeol (gingerol) (paragraphs 0002 and 0036). Cooling agents are used and include isopulegol, menthyl succinate and menthyl lactate. The warming compositions may be incorporated into flavor compositions, which include peppermint flavor compositions. The warming and cooling agents can range from 0.000001 to 10% of the final product. The flavor comprises about 0.795% of the chewing gum compositions, encompassing claims 6, 9, 16, 19 and 30. The reference differs from the instant claims insofar as it does not disclose Erospicata oil as one of the flavorings.

The secondary reference is discussed above and disclosed. The reference teaches Erospicata has a characteristic peppermint taste and smell, yet its oil contains much lower levels of menthol and much higher levels of menthone, less than 1%. The low menthol content of the essential oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The reference differs from the instant claims insofar as it does not teach consumable



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products comprising a cooling agent, a heating agent or a method of enhancing the flavor of an oral product by adding Erospicata, a cooling agent and heating agent.

It would have been obvious to one of ordinary skill in the art to have used the erospicata oil in place of or in addition to the peppermint oil when making a peppermint flavor composition of the primary reference motivated by the desire to make a favorable chewing gum without adding too much additional menthol which would provide an excessive cooling effect and cause excess irritation to the nasal, oral and gastrointestinal epithelium and not sacrificing the taste, as disclosed by the secondary reference.

In regards to claims 27-29, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claims 32-33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

Claims 1, 4, 6-11, 14-16, 18-20 and 27-33 are rejected.

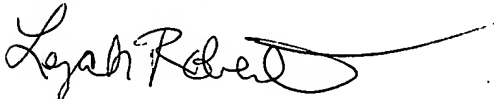
No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lezah Roberts  
Patent Examiner  
Art Unit 1614



Frederick Krass  
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